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| APPLICATION NO.                | FILING DATE                   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------|-------------------------------|----------------------|---------------------|------------------|
| 10/802,437                     | 03/17/2004                    | Douglas W. Johnson   | 10378US01           | 3520             |
| Attention: Eric                | 7590 06/03/200<br>D. Levinson | EXAMINER             |                     |                  |
| Imation Corp.<br>Legal Affairs |                               | BLOUIN, MARK S       |                     |                  |
| P.O. Box 64898                 | 3                             |                      | ART UNIT            | PAPER NUMBER     |
| St. Paul, MN 55                | 5164-0898                     |                      | 2627                |                  |
|                                |                               |                      |                     |                  |
|                                |                               |                      | MAIL DATE           | DELIVERY MODE    |
|                                |                               |                      | 06/03/2008          | PAPER            |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)        |  |  |  |  |
|--|---|---------------------|--|--|--|--|
| Office Action Occurrence   | 10/802,437  | JOHNSON, DOUGLAS W. |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit            |  |  |  |  |
|  | Mark Blouin   | 2627                |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply  |   |                     |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                     |  |  |  |  |
| Status   |   |                     |  |  |  |  |
| 1) Responsive to communication(s) filed on 12 De   | ecember 2007  |                     |  |  |  |  |
|  | action is non-final.  |                     |  |  |  |  |
| <i>;</i> —   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |                     |  |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |                     |  |  |  |  |
| ologica in addordance with the practice and i  | x parte gadyle, 1000 C.B. 11, 40  | 0.0.210.            |  |  |  |  |
| Disposition of Claims  |   |                     |  |  |  |  |
| 4)⊠ Claim(s) <u>1-19 and 21</u> is/are pending in the application.   |   |                     |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |                     |  |  |  |  |
| 5)⊠ Claim(s) <u>8-19 and 21</u> is/are allowed.  |   |                     |  |  |  |  |
| 6)⊠ Claim(s) <u>1-7</u> is/are rejected.   |   |                     |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |                     |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | <u> </u>  |                     |  |  |  |  |
| Application Papers   |   |                     |  |  |  |  |
|  |   |                     |  |  |  |  |
| 9) The specification is objected to by the Examiner.   |   |                     |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |   |                     |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |                     |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                     |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                     |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |                     |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |   |                     |  |  |  |  |
| Attachment(s)  | 1) Intonious Summans  | (PTO_413)           |  |  |  |  |
| Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 4)  |                     |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO/SB/08)   | 5) 🔲 Notice of Informal P   |                     |  |  |  |  |
| Paper No(s)/Mail Date 6) L. Other:   |   |                     |  |  |  |  |

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#### **Detailed Action**

## Response to Amendment

• The reply filed on December 12, 2007 was applied to the following effect: Claims 8,12-15, and 18 are amended, Claim 20 is cancelled, and Claim 21 is added.

## Claim Rejections - 35 USC § 112

1. All relevant rejections are withdrawn as being satisfied.

#### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lelandais (US 4,310,863).
- 4. Regarding Claim 1, Lelandais shows (Figs. 1-3) a tape guide for use with a data storage tape system, the tape guide (16,32) comprising: a bearing portion (shaft as shown in Fig 2b by inner dashed line); and a tape interface portion (60,62) extending from the bearing portion, the tape interface portion configured to support a data storage tape near a read/write head (22,24), but does not show wherein upon longitudinal movement of the data storage tape across the tape interface portion, the tape guide limits a spectral content of data storage tape lateral movement measured at the read/write head to less than 0.1 μm at lateral movement frequencies between 50 and 500 cycles/meter.

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Lelandais does not set forth these parameters in this claim. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the tape recorder of Lelandais with the claimed parameters through routine experimentation and optimization in the absence of criticality. One of ordinary skill in the art would have been motivated to do so in order to eliminate lateral movement of the tape provide more accurate reading and writing on the tape. More particularly, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Swain et al.*, 33 CCPA (Patents) 1250, 156 F.2d 239 70 USPQ 412; *Minnesota Mining and Mfg. Co. v Coe*, 69 App. D.C. 217, 99 F. 2d 986, 38 USPQ 213; *Allen et al. v Coe*, 77 App. D.C. 324, 135 F. 2d 11, 57 USPQ 136.

- 5. Regarding Claim 2, Lelandais shows (Figs. 1-3) the tape guide (16,32), wherein the tape interface portion (60,62) rotates (inherent in the roller) with respect to the bearing portion (shaft as shown in Fig 2b by inner dashed line).
- 6. Regarding Claim 3, Lelandais shows (Figs. 1-3) the tape guide (16,32), wherein the radial runout (variation of radius) of the tape guide is less than 0.5 mil (shown as perfect circle where radial runout is zero).
- 7. Regarding Claim 4, Lelandais shows (Figs. 1-3) the tape guide, wherein the tape interface portion (60,62) includes an outer surface (62) configured and positioned to have intimate contact with the data storage tape as the data storage tape passes over the tape interface portion.
- 8. Regarding Claim 5, Lelandais shows (Figs. 1-3) the tape guide, wherein the outer surface includes a plurality of substantially concentric grooves (64).

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9. Regarding Claim 6, Lelandais shows (Figs. 1-3) the tape guide, wherein the plurality of substantially concentric grooves are configured to remove air from between the data storage tape

and the outer surface of the tape interface portion (Col 3, lines 11-13).

10. Regarding Claim 7, Lelandais shows (Figs. 1-3) the tape guide, wherein the tape interface

portion is characterized by the absence of flanges (there are none).

Allowable Subject Matter

11. Claims 8-19 and 21 are allowed.

Response to Arguments

12. Applicant's arguments filed December 12, 2007 have been fully considered but they are not persuasive. The Applicant asserts on pages 6 and 7 that the rollers of Lelandais do not "effectuate" precise lateral movement control at the heads.

The Examiner maintains that these rollers (16,32) are designed and placed to tension and guide the tape precisely along a defined path which includes the heads. Lelandais is concerned with accurate a precise tape reading as evidenced in the abstract as the reduction of flutter and vibration.

The Applicant asserts on page 7 that Lelandais does not disclose that the grooves 64 have any effect on lateral tape movement, and thus one of skill would not consider modifying the rubber sheath 62 in a manner resulting in the lateral tape movement parameters of claim1.

The Examiner maintains that one of ordinary skill in the art would recognize that the surface of a roller modified with a particular material or contour would be done so for the sake of control of the tape contacting the roller surface. In doing so, Lelandais is reducing flutter and vibration which would include lateral movement.

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Therefore rejection of Claims 1-7 are upheld.

#### Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is 571-272-7583. The examiner can normally be reached on M-F from 6:00 to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joe Feild, can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mark Blouin/

Primary Examiner of Art Unit 2627

Mark Blouin Patent Examiner Art Unit 2627 May 29, 2008